ARRANGEMENT FOR REDUCING POWER IN A NETWORKING DEVICE CONFIGURED FOR OPERATING AT SELECTED NETWORK SPEEDS

ABSTRACT OF THE DISCLOSURE

A controller is configured for controlling a physical layer transceiver by setting the physical layer transceiver into a low-power operation. The physical layer transceiver is configured for operating at a selected data rate, from one of a high-speed data rate and a low data rate, according to an autonegotiation routine. The controller is configured for resetting the selected data rate to the low data rate in response to a low-power request, and restarting the autonegotiation for the low data rate within the physical layer transceiver. The controller responds to the low-power request based on a determined result of the autonegotiation for the low data rate. Hence, the controller overrides the physical layer transceiver, having selected the high-speed data rate based on autonegotiation, to renegotiate for the low data rate, enabling low-power operation at the low data rate with minimal complexity and no modification to the physical layer transceiver.